

## CLAIMS

What is claimed is:

1. For an intervertebral disc replacement device having a flange and at least one bone screw hole for receipt therethrough of at least one bone screw and at least one mounting hole, a retaining device for said at least one bone screw, comprising:

a threaded attachment member for threaded engagement with said at least one mounting hole in said flange of said intervertebral disc replacement device; and

a head flange extending from said threaded attachment member, wherein said head flange is in part abuttingly received against a side of said flange of said intervertebral disc replacement device and an outermost portion of said head flange is partially received over a portion of said at least one bone screw to prevent said at least one bone screw from backing out of said at least one bone screw hole when said retaining device is fully engaged with said intervertebral disc replacement device.

2. A retaining device as recited in claim 1, wherein said head flange is at least somewhat flexible in a substantially axial direction of said threaded attachment member.

3. A retaining device as recited in claim 1, wherein said head flange is of a convex construction from an orientation taken in relation to said threaded attachment member.

4. A retaining device as recited in claim 3, wherein said head flange is at least somewhat flexible in a substantially axial direction of said threaded attachment member.

5. A retaining device as recited in claim 4, said head flange flexing in such a manner as to cause said convex construction thereof to become flatter when said retaining device is fully engaged with said intervertebral disc replacement device, wherein said substantially flattened condition of said head flange causes said threaded attachment member to exert pressure along its said threaded engagement with said at least one mounting hole so as to prevent said threaded attachment member from backing out of said at least one mounting hole.

6. A retaining device as recited in claim 5, said at least one bone screw hole comprising first and second bone screw holes and said at least one bone screw comprising first and second bone screws.

7. A retaining device as recited in claim 6, wherein said outermost portion of said head flange is partially received over portions of said first and second bone screws to prevent said first and second bone screws from backing out of said first and second bone screw holes, respectively, when said retaining device is fully engaged with said intervertebral disc replacement device.

8. A method of preventing a bone screw from backing out of a bone screw hole in an intervertebral disc replacement device, comprising the steps of:

inserting a retaining device into a mounting hole in said intervertebral disc replacement device; and

tightening said retaining device in said mounting hole such that a portion of a head flange of said retaining device becomes flatter against a portion of said intervertebral disc replacement device and another portion of said head flange of said retaining device abuts against a portion of said bone screw.